



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/086,547	03/04/2002	Takumi Matsui	02860.0705	5331

22852 7590 05/09/2005

FINNEGAN, HENDERSON, FARABOW, GARRETT & DUNNER
LLP
901 NEW YORK AVENUE, NW
WASHINGTON, DC 20001-4413

EXAMINER

PATEL, GAUTAM

ART UNIT	PAPER NUMBER
----------	--------------

2655

DATE MAILED: 05/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/086,547

Applicant(s)

MATSUI, TAKUMI

Examiner

Gautam R. Patel

Art Unit

2655

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 November 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24,26-50,52-78,80-104,106-132,134-158 and 160-174 is/are pending in the application.
- 4a) Of the above claim(s) See Continuation Sheet is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) See Continuation Sheet is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>11-22-04</u> . | 6) <input type="checkbox"/> Other: _____ |

Continuation of Disposition of Claims: Claims withdrawn from consideration are 2,5,7,19,31,33,45,56,61,73,85,87,99,110,113,115,127,139,141 and 153.

Continuation of Disposition of Claims: Claims rejected are 1,3,4,6,8-18,20-24,26-30,32,34-44,46-50,52-55,57,58,60-72,74-78,80-84,86,88-98,100-104,106-109,111,112,114,116-126,128-132,134-138,140,142-152,154-158 and 160-174.

Response to Amendment:

1. This is in response to amendment filed on 11-22-04.
2. Claims 1-174 are pending in the application. Claims 163-174 are newly presented for examination.

ELECTION/RESTRICTION

3. After accounting for canceled and non-elected claims 1, 3-4, 6, 8-18, 20-24, 26-30, 32, 34-44, 46-50, 52, 55, 57-58, 60-72, 74-78, 80-84, 86, 88-98, 100-104, 106-109, 111-112, 114, 116-126, 128-132, 134-138, 140, 142-152, 154-158, 160-174 are pending for the examination.

NOTE: The Applicants are strongly urged to cancel all no-elected claims.

Drawings/Objection

4. The drawings are objected for following reasons:

The drawings are objected to under 37 C.F.R. § 1.83(a). The drawings must show every feature of the invention specified in the claims. Drawing only shows one positive lens and one negative lens. Therefore, the positive and negative lens group must be shown or the feature cancelled from the claim. No new matter should be entered.

Correction is required.

Applicant is required to submit a proposed drawing correction in response to this Office Action or feature cancelled from the claim. Any proposal by the applicant for amendment of the drawings to cure defects must consist of following:

Drawing changes must be made by presenting replacement figures which incorporate the desired changes and which comply with 37 CFR 1.84. An explanation of

the changes made must be presented either in the drawing amendments, or remarks, section of the amendment, and may be ***accompanied by a marked-up copy of one or more of the figures being amended, with annotations.*** Any replacement drawing sheet ***must be identified in the top margin as "Replacement Sheet"*** and include all of the figures appearing on the immediate prior version of the sheet, even though only one figure may be amended. ***Any marked-up (annotated) copy showing changes must be labeled "Annotated Marked-up Drawings" and accompany the replacement sheet in the amendment (e.g., as an appendix).***

Claim Rejections - 35 U.S.C. § 112

5. The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 10-11, 15-18, 36-37, 41-44, 64-65, 69-72, 90-91, 95-98, 118-119, 123-126, 144-145, 149-152 and 163-174 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

A "positive lens **group**" and "a negative lens **group**" required by the claims are **not described in the specification**. On page 14, lines 10 the specification mentions a positive lens group but does not explain what these are and how they are created or how they relate to the invention and other components. Accordingly, the specification does not explain to one of ordinary skill in the art at the time of the invention, how to make and or use the invention comprising the claimed so called "positive lens group". All other claims mentioned have the same problem.

6. The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter, which the applicant regards as his invention.

Claims 10-11, 15-18, 36-37, 41-44, 64-65, 69-72, 90-91, 95-98, 118-119, 123-126, 144-145, 149-152 and 163-174 are rejected under 35 U.S.C. § 112, second

Art Unit: 2655

paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 10, lines 3-4 "a positive lens **group**" having appositive refractive power .." is confusing and unclear, since no group has been defined or shown in the drawings at all. All other claims mentioned have the same problem.

Claim Rejections - 35 U.S.C. § 103

7. The following is a quotation of 35 U.S.C. § 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 6, 8-9, 20-21, 55, 57-58, 60, 62-63, 74-75, 109, 111-112, 114, 116-117, 128-129, 137-138, 140, 142-143 and 154-155 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Knight in view of Uehara et al., US. patent 4,504,616 (hereafter Uehara).

As to claim 1, Knight discloses the invention as claimed [see Figs. 2, 30B-30C and 31] including a light source, a converging optical system and recording layers comprising:

a light source [fig.2, unit 210] to emit a light flux [col. 8, lines 8-24]; and

a converging optical system [figs. 2 & 30B, units 230 and 3010] to converge the light flux emitted from the light source onto each information recording layer of the plurality of information recording layers [col. 42, line 60 to col. 43 line 12],

wherein the converging optical system converges a light flux having an image side-numerical aperture of 1.0 or more onto the each information recording layer so as to conduct recording and/or reproducing information for the each information recording layer [ABSTRACT, col. 2, line 30-43 and col. 9, line 57-62].

Knight discloses all of the above elements, including a converging optical system [figs. 2 & 30B, units 230 and 3010]. Knight does not specifically disclose that the system also has an optical element [resin sheet] having an internal transmission rate of 85% or more at apportion having a thickness of 3 mm to the extent claimed.

However, 3 mm thick elements with 85% transmission rates have been known for along time [e.g. see US patent 4,387,133 by Ichikawa]. Use of these kind of materials has been known in the art. Also Uehara clearly discloses:

A resin sheet of 3 mm thickness with 85% transmittance [col. 7, line 62 to col. 8, line 2].

Both Knight and Uehara are interested in providing material that can improve the quality of the optical system.

One of ordinary skill in the art at the time of invention would have realized that the optical converging system of Knight would have been sensitive to cloudiness due to dispersion of fine particles in the lens system, reduction this would have been advantage to the system design.

Therefore, it would have been obvious to have used an optical element of 85% transmission having thickness of 3 mm in the system of Knight as taught by Uehara because one would be motivated to reduce cloudiness due to dispersion of fine particles in the system of Knight and provide better and clear signals and improve quality of the signals and increase transparency of the system [col. 2, lines 41-47; Uehara].

8. The aforementioned claim 6, recites the following elements, inter alia, disclosed in Knight:

a selecting device [inherently present when plural layers are present] to select an information recording layer from the plurality of information recording layers, wherein recording and/or reproducing is conducted for the selected information recording layer [col. 42, line 60 to col. 43 line 12 and col. 55, lines 22-37].

Art Unit: 2655

9. The aforementioned claim 8, recites the following elements, inter alia, disclosed in Knight:

wherein the selecting device changes a wavelength of the light source in accordance with the information recording layer to be conducted recording and/or reproducing [col. 42, line 60 to col. 43 line 12 and col. 55, lines 22-37].

10. The aforementioned claim 9, recites the following elements, inter alia, disclosed in Knight:

at a light source side of the final optical element is provided an optical element to change a degree of divergence or a degree of convergence of an incident light flux on the final optical element in accordance with the information recording layer to be conducted recording and/or reproducing [col. 43 lines 13-43 and col. 55, lines 22-37].

11. The aforementioned claim 20, recites the following elements, inter alia, disclosed in Knight:

wherein the converging optical system has an optical element having a aspherical surface [col. 16, line 14 to col. 17, line 7].

12. The aforementioned claim 21, recites the following elements, inter alia, disclosed in Knight:

the converging optical system has an optical element having a diffractive surface provided with a ring-shaped diffractive structure [col. 9, lines 10-27].

13. As to claim 55, it is rejected for same reasons set forth in the rejection of claim 1, supra.

Art Unit: 2655

14. As to claims 57-58, they are claims corresponding to claims 3-4 respectively and they are therefore rejected for the similar reasons set forth in the rejection of claims 3-4 respectively, supra.

15. As to claim 60, it is rejected for similar reasons set forth in the rejection of claim 6, supra.

16. As to claim 62, it is rejected for similar reasons set forth in the rejection of claim 8, supra.

17. As to claim 63, it is rejected for similar reasons set forth in the rejection of claim 9, supra.

As to claim 75, it is rejected for similar reasons set forth in the rejection of claim 21, supra.

18. As to claim 109, it is a method claim corresponding to claim 1 and is therefore rejected for similar reasons set forth in the rejection of claim 1, supra.

19. As to claims 111-112, they claims corresponding to claims 3-4 respectively and they are therefore rejected for the similar reasons set forth in the rejection of claims 3-4 respectively, supra.

20. As to claim 114, it is rejected for similar reasons set forth in the rejection of claim 6, supra.

21. As to claim 116, it is rejected for similar reasons set forth in the rejection of claim 8, supra.

22. As to claim 117, it is rejected for similar reasons set forth in the rejection of claim 9, supra.

23. As to claim 129, it is rejected for similar reasons set forth in the rejection of claim 21, supra.
24. As to claim 137, it is a method claim corresponding to claim 1 and is therefore rejected for similar reasons set forth in the rejection of claim 1, supra.
25. As to the added limitation of transparent bas board; Knight discloses this at col.2, line 51 to col. 3, line 6 and figs. 24A and 24B.
26. As to claim 138, it is claim corresponding to claims 4 and is therefore rejected for the similar reasons set forth in the rejection of claim 4, supra.
27. As to claim 140, it is rejected for similar reasons set forth in the rejection of claim 6, supra.
28. As to claim 142, it is rejected for similar reasons set forth in the rejection of claim 8, supra.
29. As to claim 143, it is rejected for similar reasons set forth in the rejection of claim 9, supra.
30. As to claim 155, it is rejected for similar reasons set forth in the rejection of claim 21, supra.
31. As to claims 74, 128 and 154, they are claims corresponding to claim 20 and therefore they are rejected for the similar reasons set forth in the rejection of claim 20, supra.

Art Unit: 2655

32. Claims 3-4, 29-30, 32, 34-35, 46-47, 83-84, 86, 88-89 and 100-101 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Knight & Uehara as applied to claims 1, 6, 8-9, 20-21, 55, 57-58, 60, 62-63, 74-75, 109, 111-112, 114, 116-117, 128-129, 137,-138, 140, 142-143 and 154-155 above and further in view of Lee et al., US. patent 6,621,787 (hereafter Lee).

Knight & Uehara discloses all of the above elements, including the converging optical system and a gap between surfaces. Knight & Uehara does not specifically disclose details of the gap such as gap being $\frac{1}{4}$ the wavelength.

However, it is well known in the art that gaps are function of the wavelengths and they are smaller than the wavelengths for controlling S/N ratio. Also Lee clearly discloses:

the converging optical system has a final optical element opposite to the optical information recording medium, a final optical surface of the final optical element locates close to the a surface of the optical information recording medium and a gap between the final optical surface and the surface of the optical information recording medium is smaller than a wavelength of the light source [col. 7, lines 1-17].

Both Knight & Uehara and Lee are interested in improving near-field optics. Both Knight and Lee show a solid immersion optical system and related hardware.

One of ordinary skill in the art at the time of invention would have realized that the system of Knight would have been sensitive to noise and that noise would have compromised the quality of the electrical signals and reduction of noise is the good characteristics to have. Therefore, it would have been obvious to have used a gap of $\frac{1}{4}$ wavelength in the system of Knight as taught by Lee because one would be motivated to reduce noise in the system of Knight and provide better signal controls and improve quality of the signal by reducing noise due to interference phenomenon [col. 7, lines 14-17; Lee].

33. The aforementioned claim 4, recites the following elements inter alia, disclosed in Lee:

the gap is not larger than (1/4) of the wavelength of the light source [col. 7, lines 14-17; Lee].

34. As to claims 29 and 83 they are rejected for the similar reasons set forth in the rejection of claims 1 and 3, supra.

35. As to claims 30, 84, they are rejected for the similar reasons set forth in the rejection of claim 4, supra.

36. As to claims 32 and 86, they are rejected for the similar reasons set forth in the rejection of claim 6, supra.

37. As to claims 34 and 88, they are rejected for the similar reasons set forth in the rejection of claim 8, supra.

38. As to claims 35 and 89, they are rejected for the similar reasons set forth in the rejection of claim 9, supra.

39. As to claims 47, 101, they are rejected for the similar reasons set forth in the rejection of claim 21, supra.

40. As to claims 46 and 100, they are claims corresponding to claim 20 and therefore they are rejected for the similar reasons set forth in the rejection of claim 20, supra.

41. Claims 12-14, 38-40, 66-68, 92-94, 120-122, and 146-148 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Knight, Uehara and Lee as applied to claims 1, 6, 8-9, 20-21, 55, 57-58, 60, 62-63, 74-75, 109, 111-112, 114, 116-117, 128-129, 137,-138, 140, 142-143 and 154-155, 3-4, 29-30, 32, 34-35, 46-47, 83-84, 86, 88-89 and 100-101 above, and further in view of McDonald et al., US. patent 6,091,549 (hereafter McDonald).

Art Unit: 2655

Knight and Lee discloses all of the above elements, including the converging optical system and a $\frac{1}{4}$ wavelength gap between surfaces and a positive lens [fig. 30B, unit 3020] having a positive refractive power [col. 42, line 60 to col. 43, line 34; Knight]. Combination does not specifically disclose a negative lens to the extent claimed.

However, use of negative and positive lenses [or more precisely convex and concave lenses] is well known in the art for a long time. Also McDonald clearly discloses:

the optical element to change a degree of divergence or a degree of convergence comprises a positive lens [fig.2, unit 34] having a positive refracting power and a negative lens [fig. 2, unit 32] having a negative refracting power and wherein at least one of the positive lens and the negative lens is a displaceable element [inherently done to adjust the gap] [col. 5, lines 30-49].

All Knight, Lee and McDonald are interested in improving near-field optics. All shows a solid immersion optical system and related hardware and multiple layer discs.

One of ordinary skill in the art at the time of invention would have realized that cost is driving factor in design of any system and reduction of cost is important and also variation of numerical aperture should be kept to minimum.

Therefore, it would have been obvious to have used a negative lens in the system of Knight and Lee as taught by McDonald because one would be motivated to reduce number of components in system and thus reduce the over all cost of system and minimize the variation of numerical aperture thus improving the reliability of signals [col. 5, lines 38-49; McDonald].

42. The aforementioned claim 13, recites the following elements, inter alia, disclosed in McDonald:

the optical information recording medium has a first recording layer and a second recording layer provided in that order from a final optical element side, when recording and/or reproducing is conducted for the first recording layer, a gap between the positive lens and the negative lens is increased from the case that recording and/or reproducing is conducted for the second recording layer [col. 3, line 51 to col. 4, line 24].

43. The aforementioned claim 14, recites the following elements, inter alia, disclosed in McDonald:

the optical element to change a degree of divergence or a degree of convergence corrects a spherical aberration or an axial chromatic aberration interfering recording and/or reproducing information for the information recording layer to be conducted recording and/or reproducing [col. 3, line 51 to col. 4, line 24].

44. Claims 22-24, 48-50, 76-78, 102-104, 130-132 and 156-158 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Knight, & Uehara and Lee as applied to claims 1, 6, 8-9, 20-21, 55, 57-58, 60, 62-63, 74-75, 109, 111-112, 114, 116-117, 128-129, 137,-138, 140, 142-143 and 154-155, 3-4, 29-30, 32, 34-35, 46-47, 83-84, 86, 88-89 and 100-101 above, and further in view of Ichikawa et al., US. patent 6,054,503 (hereafter Ichikawa).

As to claim 22, Knight discloses all of the above elements, including the converging optical system. Knight does not specifically disclose that the optical system has an element made of plastic and of specific gravity of 2.0 or less to the extent claimed.

However, use of plastic elements of specific gravity of 2.0 is well known in the art for a long time. Also Ichikawa clearly discloses:

an optical element made of a material having a specific gravity of 2.0 or less [abstract and col. 1, lines 29-47].

One of ordinary skill in the art at the time of invention would have realized that weight of the system should be kept minimum and one of way to do this is to use plastic lenses instead heavy glass lenses.

Therefore, it would have been obvious to have used a plastic lens with specific gravity of less than 2.0 in the system of Knight as taught by Ichikawa because one would be motivated to reduce the weight of the over all system and thus reduce the over all cost of system [col. 1, lines 13-24; Ichikawa].

45. The aforementioned claim 23, recites the following elements inter alia, disclosed in Ichikawa:

the converging optical system has an optical element made of a plastic material [abstract and col. 1, lines 29-47].

46. As to claim 24, Knight, Uehara and Ichikawa teaches all of the above elements. Combination does not specifically teach material having a saturation water absorption of 0.5% or less. "Official Notice" is taken that both the concept and the advantages of providing material having a saturation water absorption of 0.5% or less are well known and expected in the art. It would have been obvious to include material having a saturation water absorption of 0.5% or less in the system of Knight and Uehara as this less absorption material are known to provide the system with better optical characteristics and less weight thereby saving overall system cost. These concepts are well known in the art and do not constitute a patentably distinct limitation, per se [M.P.E.P. 2144.03].

47. As to group of claims 48-50, 76-78, 102-104, 130-132 and 156-158, they are claims corresponding to claims 22-24 and therefore they are rejected for the similar reasons set forth in the rejection of claims 22-24, supra.

48. Claims 26-28, 52-54, 80-82-106-108, 134-136, and 160-162 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Knight and Lee as applied to claims 1, 6, 8-9, 20-21, 55, 57-58, 60, 62-63, 74-75, 109, 111-112, 114, 116-117, 128-129, 137,-138, 140, 142-143 and 154-155, 3-4, 29-30, 32, 34-35, 46-47, 83-84, 86, 88-89 and 100-101 above, and further in view of Aarts et al., US. patent 6,594,205 (hereafter Aarts).

As to claim 26, Knight and Uehara disclose all of the above elements, including the converging optical system. Knight does not specifically disclose that the well known diaphragms associated with actuators to the extent claimed.

However, use of diaphragms is well known in the art for a long time. Also Aarts clearly discloses:

at least two diaphragms to regulate an image side-numerical aperture for the plurality of information recording layers of the optical information recording medium [col. 6, lines 4-41 and fig. 3].

One of ordinary skill in the art at the time of invention would have realized that correction of spherical aberration is an important characteristic for better system signals.

Therefore, it would have been obvious to have used two diaphragms in the system of Knight as taught by Aarts because one would be motivated to reduce the aberration in the system and thus gain more accurate signals, thus increasing reliability of the system [col. 6, lines 4-14; Aarts].

49. The aforementioned claim 27, recites the following elements inter alia, disclosed in Aarts:

at least one of the at least two diaphragms is located between a final optical element and the optical information recording medium [col. 6, lines 4-41 and fig. 3].

50. As to claim 28, Knight, Uehara and Ichikawa teaches all of the above elements. Combination does not specifically teach that optical element can be made by etching. "Official Notice" is taken that both the concept and the advantages of making material by etching are well known since 1957 and expected in the art. It would have been obvious to include an optical material formed by etching in the system of Knight as this kind of material are known to provide the system with better reliability less cost. These concepts are well known in the art and do not constitute a patentably distinct limitation, per se [M.P.E.P. 2144.03].

Art Unit: 2655

51. As to group of claims 52-54, 80-82, 106-108, 134-136, 160-162 they are claims corresponding to claims 26-28 and therefore they are rejected for the similar reasons set forth in the rejection of claims 26-28, supra.

52. A search based on the best understanding of the claims has been made to find the most pertinent art, but no statement about invention will be appropriate at this time regarding the allowableness of claims 10-11, 15-18, 36-37, 41-44, 64-65, 69-72, 90-91, 95-98, 118-119, 123-126, 144-145, 149-152 and 163-174 and no art rejection will be made in this office action regarding the claims 10-11, 15-18, 36-37, 41-44, 64-65, 69-72, 90-91, 95-98, 118-119, 123-126, 144-145, 149-152 and 163-174, due to the speculation required to interpret the claims because of their indefiniteness under 35 U.S.C. 112, 1st and 2nd paragraphs as noted above (see *In re Steele*, 134 USPQ 292).

53. Applicant's arguments filed on 11-22-04 have been fully considered but they are not deemed to be persuasive for the following reasons.

In the REMARKS, the Applicant argues as follows:

A) That: "With entry of this amendment claims 1, 3, 4, 6, 8-18, 20-30... 154-174 are pending and under consideration." [page 58, para. 2; REMARKS].

It seems typographical error was made since claims 25, 51, 105, 133 and 159 are canceled [see same paragraph, top portion], they do not exist and are therefore not under consideration.

B) That: "in general optics field and in this application, the term "lens group" does not limit the number of lenses which comprises the lens group to more than one lens. In other words, one skill in the art of optics would understand the meaning of "lens group" to comprise not only multiple lenses but also a single lens. Therefore, the recitation of either a "positive lens group" or a "negative lens group" in the claims of the instant

Art Unit: 2655

application includes an embodiment comprising a single positive lens or a single negative lens. [page 58-59, para. 4 & 1; REMARKS].

FIRST : The examiner has given careful consideration the argument presented by the Applicants. However careful reading of the specification shows that no such argument or explanation has been presented in the specification to the act that group is defines as a single lens.

SECOND: even thought the Applicants can be their own lexicographers, they should not change the normal meaning of the word.

THIRD: Enclosed is the copy of a page from the dictionary which defined group as TWO or more. And the Examiner tends to agree with dictionary definition of the "group" in absence of any definition at all in the specification to the contrary.

Other prior art cited

54. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Kim et al. (US. Patent 5,948,544) "Polyester multilayer sheet".
- b. Ichikawa et al. (US. Patent 4,387,133) "Laminated light ...".
- c. Ohnaga et al. (US. patent 6,143,826) "Polymer blend"

55. Applicant's amendment necessitated the new grounds of rejection presented in this office action. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P.

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

Art Unit: 2655

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Contact Information

56. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gautam R. Patel whose telephone number is 571-272-7625. The examiner can normally be reached on Monday through Thursday from 7:30 to 6.

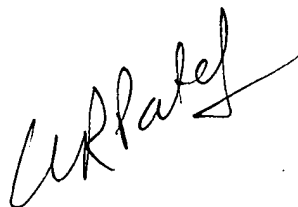
The appropriate fax number for the organization (Group 2650) where this application or proceeding is assigned is 703-872-9306.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Doris To can be reached on (571) 272-7629.

Any inquiry of a general nature or relating to the status of this application should be directed to the Electronic Business Center whose telephone number is 866-217-9197 or the USPTO contact Center telephone number is (800) PTO-9199.

Gautam R. Patel
Primary Examiner
Group Art Unit 2655

April 30, 2005

A handwritten signature in black ink, appearing to read 'Gautam R. Patel', with a stylized flourish at the end.

**GAUTAM R. PATEL
PRIMARY EXAMINER**